Optional Features for Outdoor Learning Areas

Greenhouses

Description – In areas with four seasons, a greenhouse can provide opportunities to continue working in the environment during inclement weather. When you place an ecosystem within glass or plastic walls, it becomes a metaphor for the earth and how it works. It provides students an opportunity to extend gardening techniques, pest management, and inquiry based science activities into the winter months. Propagating plants, preparing seedlings, storing tender perennials, picking fresh salads in winter, and enjoying colorful bouquets of flowers on a cold, dreary day are just a few activities that are possible when there is a greenhouse on school grounds.

Size – Greenhouses are available in many styles and sizes. A typical school greenhouse, 16 feet by 30 feet, allows a class to work comfortably inside. Smaller, more budget conscious greenhouses are available and will hold small groups of students.

Location – Greenhouses perform best in an open area with plenty of sunshine and ventilation. They should be near sources of water and electricity.

Materials Needed – A gravel floor is recommended for greenhouses. Greenhouse kits are available on line when you type “greenhouse kits” into

any Internet search engine. You may choose glass, polycarbonate, or plastic styles. Keep in mind fire resistance, hail resistance, guaranteed life span, and energy efficiency when you are choosing. Make sure you have ventilating fans whether manually or thermostatically controlled, to provide needed air circulation. Depending on the your area and climate, you may need heaters for mid-winter success. Supplies of running water will need to be in or near the greenhouse. Electricity will also be needed. Obtain lumber for building wooden shelves and work areas. Mount a thermometer inside the greenhouse for monitoring temperature. Occasionally, local law enforcement agencies have confiscated greenhouses they will give to schools.

Labor Needed – Labor is needed to prepare the floor of the greenhouse and spread the gravel, put together the kit, and build wooden shelves and work areas.

Technical Assistance – Many local nurseries operate their own greenhouses and can share expertise. Your local Soil and Conservation District and Cooperative Extension Offices may also be of assistance. See **http://weba.ky.gov/genericsearch/LicenseSearch.asp?AGY=17** for offices near you.

Maintenance – If you have chosen a greenhouse with a plastic cover, they often need to be recovered in 5 to 10 years. During extended vacations, a schedule for watering and checking heat and ventilation needs to be maintained.

Challenges – Pest management in the greenhouse often becomes a problem. With student allergies and sensitivities, care should be taken before considering the use of any sprays or chemical products in this contained place. Organic gardening and natural pest controls are strongly encouraged.